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FULL ESTIMATED COST	0.80	1.43

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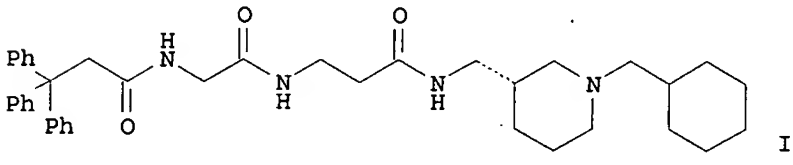
FILE COVERS 1907 - 27 Jun 2003 VOL 138 ISS 26
FILE LAST UPDATED: 25 Jun 2003 (20030625/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2
L3 2 L2

=> d bib abs 1-2

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
AN 2002:54472 CAPLUS
DN 136:256738
TI Cyclohexylmethylpiperidinyltriphenylpropioamide: a selective muscarinic M3 antagonist discriminating against the other receptor subtypes
AU Sagara, Yufu; Sagara, Takeshi; Mase, Toshiaki; Kimura, Toshifumi; Numazawa, Tomoshige; Fujikawa, Toru; Noguchi, Kazuhito; Ohtake, Norikazu
CS Banyu Tsukuba Research Institute in collaboration with Merck Research Laboratories, Tsukuba, Ibaraki, 300-2611, Japan
SO Journal of Medicinal Chemistry (2002), 45(4), 984-987
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
GI



I

AB To discover a highly selective M3 antagonist, a combinatorial library was prepd. The library was designed to identify a novel structural class of M3 antagonists by exploring the spatial arrangement of the pharmacophores

in known M3 antagonists. After the evaluation of 1000 library members, a potent M3 antagonist, (I) (Ki = 0.31 nM), with novel structural features was identified. Compd. I showed high selectivity for M3 receptors over the other muscarinic receptor subtypes (M1/M3 = 380-fold, M2/M3 = 98-fold, M4/M3 = 45-fold, M5/M3 = 120-fold).

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
AN 2001:78358 CAPLUS
DN 134:147498
TI Preparation of amide derivatives as selective muscarinic M3 antagonists
IN Sagara, Yufu; Uchiyama, Minaho; Naya, Akira; Kimura, Toshifumi; Numazawa, Tomoshige; Fujikawa, Toru; Otake, Norikazu; Noguchi, Kazuhito
PA Banyu Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 187 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001007406	A1	20010201	WO 2000-JP4762	20000714
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1213281	A1	20020612	EP 2000-946352	20000714
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI	JP 1999-209292	A	19990723		
	JP 1999-338617	A	19991129		
	WO 2000-JP4762	W	20000714		

OS MARPAT 134:147498
AB The title compds. Ar1C(Ar2)(Ar3)CHR1CON(R2)CHR3(CH2)pXY(R4)CHR5(CH2)mCONH(CH2)nA [A is piperidine moiety (generic structure given), etc.; Ar1, Ar2 and Ar3 are each optionally substituted phenyl; p is 0 or 1; m, n are each 0, 1 or 2 ; R1 is hydrogen or optionally substituted lower alkyl; R2, R3, R4 and R5 are each hydrogen, optionally substituted lower alkyl, or the like; X is carbonyl or methylene; Y is nitrogen or methine] are prepd. The title compds. are useful as remedies for respiratory, urol. or digestive diseases. In in vitro tests for M3 antagonism, compds. of this invention showed the Ki values of 1.3 nM to 4.7 nM; in in vitro tests for M1 and M2 antagonism, said compds. showed the Ki values of 110 nM to > 2500 nM.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L2           55 SEA FILE=REGISTRY SSS FUL L1

=> d l1
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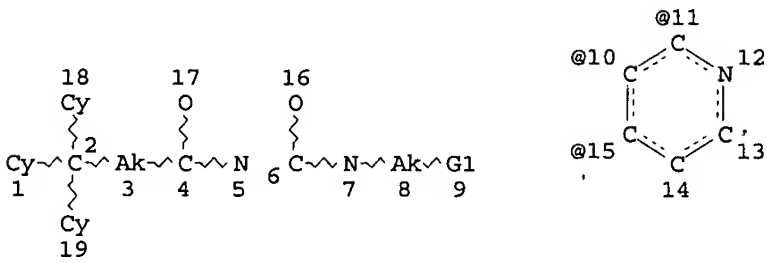

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC  10
NUMBER OF NODES IS  19

STEREO ATTRIBUTES: NONE


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L1 HAS NO ANSWERS


=> d scan l2

L2    55 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN    Benzenepropanamide, N-[6-oxo-6-[[[1-(phenylmethyl)-3-
      piperidinyl]methyl]amino]hexyl]-.beta.,.beta.-diphenyl- (9CI)
MF    C40 H47 N3 O2
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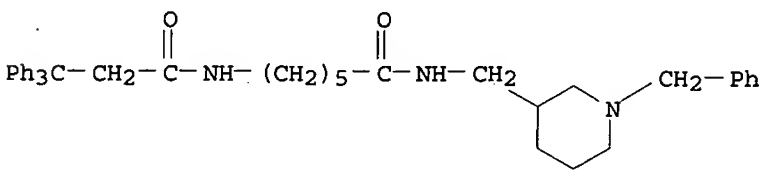

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


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AN 1995:849168 CAPLUS
DN 123:285789
TI Preparation of heterocyclyl carbamate derivatives with muscarine M3 receptor antagonism
IN Takeuchi, Makoto; Naito, Ryo; Morihira, Koichiro; Hayakawa, Masahiko; Ikeda, Ken; Isomura, Yasuo; Tomioka, Kenichi
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9506635	A1	19950309	WO 1994-JP1436	19940831
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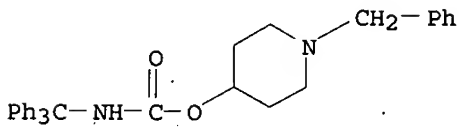
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9475458	A1	19950322	AU 1994-75458	19940831
PRAI	JP 1993-218620		19930902		
	JP 1994-77575		19940415		
	WO 1994-JP1436		19940831		

OS MARPAT 123:285789
GI For diagram(s), see printed CA Issue.
AB Heterocyclyl (thio)carbamate and (thio)urea derivs. represented by general formula [I; R = (un)substituted aryl; R1 = cycloalkyl, (un)substituted aryl; R2 = H, OH, lower alkyl, lower alkoxy, cycloalkyl, aryl; R3 = H, lower alkyl; X = O, S; Y = O, S, (un)substituted NH, CH2, OCH2; ring A = heterocyclyl Q - Q1; wherein m, n = 1-4, provided that m + n = 3-5; l = 1-3, provided that m + l = 3-5; p, q = 0, 1; r, s, t = 0-3, provided that r + s + t = 2 or 3; Z = N(O)qR4, N+R5R6.Q-; Z1 = N(O)q, N+R6.Q-; wherein Q- = anion; R4 = H, lower alkyl, alkenyl, or alkynyl, B-R7; R5 = lower alkyl, alkenyl, or alkynyl, B-R7; R6 = lower alkyl, alkenyl, or alkynyl; wherein R7 = cycloalkyl, lower (hydroxy)alkoxy, benzhydryl, (un)substituted aryl, optionally benzene ring-fused or (un)substituted heterocyclyl contg. 1 or 2 heteroatoms; B = single bond, lower alkylene, alkenylene, or alkynylene] or salts, hydrates or solvates thereof are prepd. A muscarine M3 receptor antagonist for preventing or treating digestive tract, respiratory or urol. diseases such as irritable bowel syndrome, spasmodic colitis, diverticulitis, chronic obstructive lung diseases, chronic bronchitis, asthma, rhinitis, neural pollakiurea, nocturnal enuresis, nervous bladder, unstable bladder, bladder contracture, chronic cystitis, urinary incontinence, and pollakiurea, contains the said compd. I. Thus, 2.92 g NaBH(OAc)3 was added portion-wise to a soln. of 1.60 g 4-piperidyl N-benzhydrylcarbamate hydrochloride (prepn. given) and 0.40 mL 3-thiophenecarbaldehyde in 20 mL ClCH2CH2Cl and the resulting mixt. was stirred at room temp. overnight to give, after silica gel chromatog. and salt formation, a title compd. [II.(CO2H)2]. II.(CO2H)2 in vitro showed binding affinity to muscarine M1 receptor of cerebral cortex, muscarine M2 receptor of heart, and muscarine M3 receptor of submaxillary gland with Ki value of 1.0, 350, and 6.0 nM, resp., and Ki(M2 receptor)/Ki (M3 receptor) ratio of 58.
IT **168829-14-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclyl (thio)carbamate derivs. as muscarine M3 receptor antagonists)
RN 168829-14-9 CAPLUS
CN Carbamic acid, (triphenylmethyl)-, 1-(phenylmethyl)-4-piperidinyl ester,

(2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

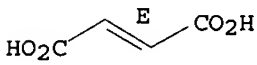
CRN 168829-13-8
CMF C32 H32 N2 O2



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



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=> s (serine(l)protease)(l)(indol?(l)piperidin?)
          86694 SERINE
          73302 PROTEASE
          85362 INDOL?
          77850 PIPERIDIN?
L1            1 (SERINE(L)PROTEASE)(L)(INDOL?(L)PIPERIDIN?)

=> d bib

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
AN   2002:793361  CAPLUS
DN   137:310810
TI   Preparation of indole and other fused heterocyclic inhibitors of factor Xa
     useful for treating/preventing thromboembolic disorders
IN   Jacobson, Irina C.; Quan, Mimi L.; Wexler, Ruth R.
PA   Bristol-Myers Squibb Company, USA
SO   PCT Int. Appl., 149 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
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PI   WO 2002080853      A2    20021017       WO 2002-US10891  20020408
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-282438P   P     20010409
OS   MARPAT 137:310810


=> d abs

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
GI
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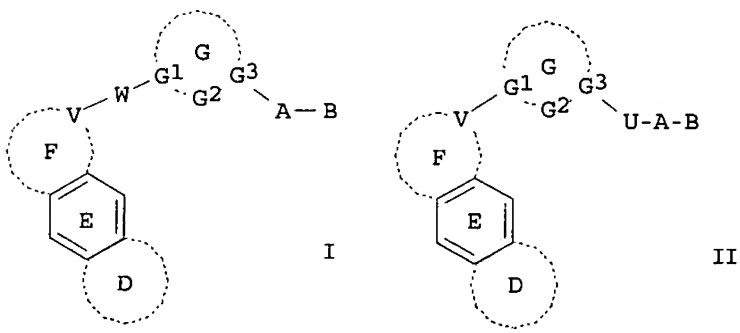

AB This invention relates generally to a novel class of fused heterocyclic compds. (shown as I and II; e.g. 1-[[1-(3-fluoro-2'-methylsulfonyl)[1,1'-

biphenyl]-4-yl]-2-oxo-3-**piperidinyl**]-1H-**indole**
-6-carbonitrile) or pharmaceutically acceptable salt forms thereof, which are inhibitors of trypsin-like **serine protease**
enzymes, esp. factor Xa, pharmaceutical compns. contg. the same, and methods of using the same as anticoagulant agents for treatment and prevention of thromboembolic disorders. Some compds. of this invention were evaluated and found to exhibit a Ki of .ltoreq.10 .mu.M, thereby confirming the utility of the compds. of the present invention as effective thrombin inhibitors. Although the methods of prepn. are not claimed, .apprx.15 example prepns. are included. In I and II, ring D, including the two atoms of ring E to which it is attached, is a 5-6 membered nonarom. ring consisting of C atoms, 0-1 double bonds, and 0-2 heteroatoms N, O, and S(O)p, and ring D is substituted with 0-2 R1, provided that when ring D is unsubstituted, it consists of at least one heteroatom; alternatively, ring D, including the two atoms of ring E to which it is attached, is a 5-6 membered arom. system consisting of C atoms and 0-2 heteroatoms N, O, and S(O)p, and ring D is substituted with 0-2 R1, provided that when ring D is unsubstituted, it consists of at least one heteroatom. E is selected from Ph, pyridyl, pyrimidyl, pyrazinyl, and pyridazinyl, and is substituted with 0-1 R1; alternatively, ring D is absent and ring E is selected from Ph, pyridyl, pyrimidyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, thiazolyl, thienyl and triazolyl, and ring E is substituted with 0-2 Ra; Ra is selected from H, C1-4 alkyl, F, Cl, Br, I, OH, OCH3, OCH2CH3, OCH(CH3)2, OCH2CH2CH3, CN, C(:NR8)NR7R9, NHC(:NR8)NR7R9, NR8CH(:NR7), C(O)NR7R8, (CR8R9)tNR7R8, SH, SCH3, SCH2CH3, SCHMe2, SCH2CH2CH3, S(O)R3b, S(O)2R3a, S(O)2NR2R2a, and OCF3; alternatively, two Ras combine to form methylenedioxy or ethylenedioxy. Alternatively, ring D is absent and ring E is selected from Ph, pyridyl, pyrimidyl, pyrazinyl, pyridazinyl, and thienyl, and ring E is substituted with 1 R and with a 5-6 membered arom. heterocycle consisting of: C atoms and 1-4 heteroatoms N, O, and S(O)p substituted with 0-1 carbonyl groups and 0-2 R1. Ring F completes a 5-7 membered heterocycle consisting of C atoms, 1-3 heteroatoms N, NH, O, and -S(O)p-, 0-2 addnl. double bonds, and 0-2 carbonyl groups, provided that other than a O-O, O-S, or S-S bond is present in the ring and ring F is substituted with 0-1 R4c. Ring G completes a 5-7 membered nonarom. heterocycle consisting of C atoms, 1-3 heteroatoms N, NZ, O, and S(O)p, 0-2 double bonds, and 0-3 carbonyl groups, and ring G is substituted with 0-2 R1a, provided that other than a O-O, O-S, or S-S bond is present in ring G. Z is selected from H, S(O)2NHR3, C(O)R3, C(O)NHR3, C(O)OR3f, S(O)R3f, S(O)2R3f, C1-6 alkyl substituted with 0-2 R1a; C2-6 alkenyl substituted with 0-2 R1a; C2-6 alkynyl substituted with 0-2 R1a; -(C0-4 alkyl)-C3-10-carbocycle substituted with 0-3 R1a; -(C0-4 alkyl)-5-12 membered-heterocycle substituted with 0-3 R1a. G1 is selected from C, CH, and N; G2 is selected from CH, CH2, C(O), O, S(O)p, N, and NH; G3 is selected from C, CH, and N; A is selected from C3-10 carbocycle substituted with 0-2 R4, and 5-12 membered heterocycle consisting of C atoms and from 1-4 heteroatoms N, O, and S and substituted with 0-2 R4; B is selected from: Y, X-Y, (CH2)0-2C(O)NR2R2a, (CH2)0-2NR2R2a, C(:NR2)NR2R2a, and NR2C(:NR2)NR2R2a, provided that G3 and B are attached to different atoms on A. X is selected from -(CR2R2a)1-4-, -CR2(CR2R2b)(CH2)t-, -C(O)-, -C(:NR1c)-, -CR2(NR2R2a)-, -CR2(OR2)-, -CR2(SR2)-, -C(O)CR2R2a-, -CR2R2aC(O), -S-, -S(O)-, -S(O)2-, -SCR2R2a-, -S(O)CR2R2a-, -S(O)2CR2R2a-, -CR2R2aS-, -CR2R2aS(O)-, -CR2R2aS(O)2-, -S(O)2NR2-, -NR2S(O)2-, -NR2S(O)2CR2R2a-, -CR2R2aS(O)2NR2-, -NR2S(O)2NR2-, -C(O)NR2-, -NR2C(O)-, -C(O)NR2CR2R2a-, -NR2C(O)CR2R2a-, -CR2R2aC(O)NR2-, -CR2R2aNR2C(O)-, -NR2C(O)O-, -OC(O)NR2-, -NR2C(O)NR2-, -NR2-, -NR2CR2R2a-, -CR2R2aNR2-, O, -CR2R2aO-, and -OCR2R2a-. Y is selected from -(CH2)rNR2R2a; C3-10 carbocycle substituted with 0-2 R4a; and 5-10 membered heterocycle consisting of C atoms and from 1-4 heteroatoms N, O, and S and substituted with 0-2 R4a; provided that X-Y do not form a N-N, O-N, or S-N bond; V is selected from C, CH, and N; U is a bond or is selected from CHR3b, C(O), O, S(O)p, NR3b, C(O)NR3, NR3C(O), C(O)CH2,

CH2C(O), S(O)pNR3, NR3S(O)p, OCH2, CH2O, NR3bCH2, and CH2NR3b; provided that when ring D is absent, U is other than a bond; W is a bond or is selected from CHR3b, C(O), O, S(O)p, NR3b, C(O)NR3, NR3C(O), C(O)CH2, CH2C(O), S(O)pNR3, NR3S(O)p, OCH2, CH2O, NR3bCH2, and CH2NR3b; provided that when ring D is absent, W is a bond. Variables in I and II not defined above are defined in the claims.